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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,259	10/10/2003	James A. Solis	2039.018200/210384	1724

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EXAMINER	
ANTHONY, JOSEPH DAVID	
ART UNIT	**PAPER NUMBER**
1714	

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/684,259	SOLIS ET AL.	
	Examiner	Art Unit	
	Joseph D. Anthony	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) *28-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-27 in the reply filed on 04/13/06 is acknowledged. The traversal is on the ground(s) that there would be no undue burden on the examiner to examine Group II, claims 28-30 and that applicants are somehow "not aware on the use of the stored oxygen scavenger in the asserted materially different process of scavenging hydrogen gas". This is not found persuasive because the examiner, who is far closer to the examination process than is applicant, readily, affirms that to examine Group II claims would have been an undue burden. Furthermore, applicant's attention is directed towards Chung, deceased U.S. Patent Number 4,489,191 where it is clearly disclosed that it is well known in the art to use unsaturated hydrocarbons, such as dicyclopentadiene as hydrogen gas scavengers, see abstract and column 5, lines 50-60. Applicant attention is also drawn to Patent Application Publication US2005/0002857A1 for its clear teaching that pi-conjugated organic substances are well known in the art as hydrogen gas scavengers.

The requirement is still deemed proper and is therefore made FINAL.

Oath/Declaration

2. A new oath or declaration is required because it claims foreign priority to U.S.A. PCT/US03/32252 filed 10/10/2003. As applicant should know PCT/US03/32252 is not a foreign application, but rather a domestic application, and said claim of priority would have to have been filed under 35 U.S.C. 120 instead. Another problem here is that

PCT/US03/32252 was filed on the exact same date as the present application S.N. 10/684,259, namely 10/10/2003, so it is not seen how PCT/US03/32252 can be considered a priority document at all. The wording of an oath or declaration cannot be amended. If the wording is not correct or if all of the required affirmations have not been made or if it has not been properly subscribed to, a new oath or declaration is required. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02.

Priority

3. Although applicant claims priority to provisional application 60/418,654 filed 10/15/2002, the effective filling date of all pending claims is deemed to be 10/10/2003 which is the actual filed date of the present application. The reason for this is very clear since applicant's pending method of independent claim 1 requires only two steps a) and b) whereas the corresponding method set forth in Provisional Application 60/418,654 filed 10/15/2002, required four method steps a), b), c) and d), see page 5, lines 13-19, page 5, lines 24-29, and claims 10-20 of said Provisional Application. (Note: applicant's pending method steps a) and b) correspond to Provisional Application's method steps a) and d)).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2-15, 22 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claim 2 is totally indefinite in regards to what is meant by: "c) storing the oxygen scavenger". What does applicant mean by storing? What are the metes and bounds of the scope of the word "storing", since applicant's specification only discloses storing the oxygen scavenger in a container? Since applicant's claims is so indefinite the broadest reasonable interpretation will be given to the scope of the claim for the below prior-art rejections. As such, for the below prior-art rejections, "storing" is deemed to encompass just leaving the oxygen scavenger where it is situated during the irradiation process since such is a form of storage even though the length of time of storage is very short. Such a short time of storage is a moot issue since applicant's claim 2 has no claimed storage time minimum.

Dependent claim 3 is indefinite because the limitation of this claim of "storing the oxygen scavenger in a container" makes step b) of independent claim 1, from which claim 3 indirectly depends, indefinite. Is step b) performed inside the container or is the oxygen scavenging material first removed from the container before it is subjected to the final does of actinic radiation?

Dependent claims 22 and 25 are indefinite for basically the same reasons as is dependent claim 3 is indefinite.

Dependent claims 4-15 are rejected here because they are dependent on rejected base claims.

Claim Objections

6. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 8 is not further limiting of claim 3 from which it directly depends, since claim 3 already requires storing the oxygen scavenger in a container.

7. Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-2, 15-21, 23-24, and 26-27 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Becraft et al. U.S. Patent Number 5,911,910 or Luthra et al. U.S. Patent Number 6,287,481.

Becraft et al. teach a method includes the steps of providing an article comprising an oxidizable organic compound; passing the article through a chamber; exposing the article, while in the chamber, to a source of actinic radiation at a wavelength, intensity and residence time sufficient to provide the article with a dose of actinic radiation of at least 100 mJ/cm.sup.2 ; and exposing the article, while in the chamber, to a source of heat sufficient to raise the temperature inside the chamber to at least 55.degree. F. An apparatus is also disclosed, see abstract.

Luthra et al teach a method for triggering an oxygen scavenging film includes the steps of providing an oxygen scavenging film comprising an oxidizable organic

compound and, optionally, a transition metal catalyst; and exposing the film to a source of UV-C light at a wavelength, intensity and residence time sufficient to provide the film with a dose of UV-C light of at least 100 mJ/cm.sup.2. An apparatus and packaging system are also disclosed, see abstract.

Applicant's claims are deemed to be anticipated in light of Becraft et al. disclosure of column 8, lines 33-46, or Luthra et al disclosure of column 6, line 60 to column 7, line 5 wherein Becraft et al. and Luthra et al both directly discloses exposing the oxygen scavenger to actinic radiation in a stepwise process wherein the film is exposed to a plurality of discrete periods of time. For example, if the intended exposure time or residence time is to be 40 seconds, the exposing step can be carried out in a series of four exposing steps each 10 seconds long, preferably with a two second interval there between. Such stepwise exposure steps are disclosed to provide enhanced oxygen scavenging characteristics of the oxygen scavenger triggered thereby. In the above said example, it should be clear that it is not until the forth exposure step that the oxygen scavenger becomes fully triggered by the actinic radiation, since if such occurred earlier then there would be no need to waste time and energy with further exposing steps. It is thus clear that in the first exposing step insufficient actinic radiation is imparted to the oxygen scavenger to trigger it. In the alternative, Becraft et al. and Luthra et al. can be said to "differ" from applicant's claimed invention only that there is not a direct teaching (i.e. by way of a specific experimental example) to a stepwise irradiation process of an actual oxygen scavenging material. It would thus have been obvious to one having ordinary skill in the art to use the direct

disclosure of Becraft et al's column 8, lines 33-46, or Luthra et al's column 6, line 60 to column 7, line 5, as overwhelming strong motivation to actually perform an irradiation process of an oxygen scavenger material that comprises stepwise irradiation process steps.

10. Claims 1-2, 15-21, 23-24, and 26-27 are rejected under 35 U.S.C. 102(e) as anticipated by Cook, Jr. et al. U.S. Patent Number 6,449,923.

Cook, Jr. et al. teach a method for triggering an oxygen scavenging composition for use in packaging an oxygen sensitive article includes the steps of providing an oxygen scavenging composition including an oxidizable organic compound, and exposing the composition to a source of pulsed light wherein each pulse has a duration of between 1 microsecond and 1 millisecond, a frequency of between 0.1 to 100 Hertz, and an intensity of at least 350 mW/cm.sup.2 so that each pulse provides the composition with a dose of UV light of at least 0.1 J/cm.sup.2 so as to provide a triggered composition. The triggered composition can be applied to an article so as to provide an oxygen scavenging package. An apparatus and packaging system are also disclosed, see abstract, column 2, line 57 to column 3, lines 16, column 3, line 59 to column 5, line 60, examples and claims. Applicant's claims are deemed to be clearly anticipated over said disclosure of the patent. It should be clear that it is not until the final pulsed exposure step that the oxygen scavenger becomes fully triggered by the actinic radiation, since if such occurred earlier then there would be no need to waste time and energy with further pulsed exposing steps. It is thus clear that in the first

pulsed exposing step insufficient actinic radiation is imparted to the oxygen scavenger to trigger it.

Prior-Art Cited But Not Applied

11. Any prior-art reference which is cited on FORM PTO-892 but not applied, is cited only to show the general state of the prior-art at the time of applicant's invention.

Examiner Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The centralized FAX machine number is (571) 273-8300. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.

Joseph D. Anthony
Primary Patent Examiner
Art Unit 1714

6/23/06